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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Andreas Loew

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Robert D. Shedd

Thomson Licensing LLC

PO Box 5312

PRINCETON, NJ 08543-5312

EXAMINER

REINIER, BARBARA DIANE

ART UNIT

PAPER NUMBER

2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/527,579	Applicant(s) LOEW, ANDREAS	
	Examiner Barbara D. Reinier	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-29 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) 1-14,30 and 31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-29 and 32-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see pages 5-8, filed 11/21/2008, with respect to the rejection(s) of claim(s) 15-29 and 32-34 under 35 USC § 102 and 35 USC § 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of further clarification provided in Applicant's remarks.

Specification

2. Claim 27 objected to because of the following informalities: claim 27 appears to have omitted text such that it does not make sense as written. Since the remaining text of this claim is identical to portions of claim 26, the examiner has interpreted claim 27 to read "*Apparatus according to claim 21, wherein one of the memories supplies a correction coefficient to a respective one of the multipliers*" and has evaluated it as such. Appropriate correction is required.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 15-29 and 33-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Rai et al (US 6,337,692).

Regarding claim 15: Rai teaches an apparatus (**system**) for correcting color video signals (**col. 1 lines 14-16**), comprising: a matrix (**T-matrix, col. 18 lines 24-29**), through which the color video signals pass to control the proportions of three primary colors in matrixed color value signals (**RGB, col. 17 lines 47-50**), means for controlling the matrix as a function of hue of the color video signals (**col. 18 lines 2-4 & lines 17-19**) respectively, and means for controlling the matrix as a function of color saturation (**col. 18 lines 2-4 & lines 37-39**); wherein the matrix comprises nine multipliers and three adders, wherein three of the nine multipliers are connected to one adder, respectively (**as shown by the T-Matrix multiplication circuit 1306 of Figure 13B**).

Regarding claim 16: Rai teaches an apparatus further comprising memories for storing coefficients of the matrix (**LUT in memory**) that are set as a function of hue of the color video signals (**step 910 of Figure 9, col. 27 lines 28-30**).

Regarding claim 17: Rai teaches an apparatus further comprising memories for storing correction values for the coefficients of the matrix (**memory for maintaining the correction LUT, col. 30 lines 15-18**), wherein the correction values are set as a function of hue of the color video signals (**col. 30 lines 8-10**).

Regarding claims 18 and 19: Rai teaches an apparatus further comprising a converter

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(col. 13 lines 62-65) for generating a hue signal (**hue ramp 1222 of Figure 12**) from the color video signals (**col. 7 lines 10-14 & col. 17 lines 47-60**), the hue signal connected to inputs of the memories (**LUT 1216 of Figure 12, col. 29 lines 46-54**).

Regarding claims 20 and 21: Rai teaches an apparatus wherein the converter (**col. 13 lines 62-65**) generates a color saturation signal (**saturation ramp 1224 of Figure 12**) supplied to multipliers located in the supply lines of the correction values to the matrix (**col. 13 lines 42-60**).

Regarding claims 22-25: Rai teaches an apparatus wherein the color video signals are provided as color value signals, wherein the converter comprises a converter matrix for generating color difference signals (**RY and BY, col. 10 lines 59-67 – col. 11 lines 1-2**) and a coordinate converter (**col. 25 lines 60-64**).

Regarding claims 26, 27, 33 and 34: Rai teaches an apparatus wherein one of the memories (**correction values from any or all of LUTs 1216, 1218 and 1220 of Figure 12, col. 30 lines 8-10**) supplies a correction coefficient to a respective one of the further multipliers (**col. 13 lines 42-60**).

Regarding claim 28: Rai teaches an apparatus according to Claim 16, further comprising a computer for loading the correction values into the memories, and the

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means for controlling the matrix having a program on a computer readable medium for setting the correction values (**col. 5 lines 21-28**).

Regarding claim 29: Rai teaches an apparatus according to Claim 28, comprising a device for the manual setting of the correction values (**col. 13 lines 65-67**).

Regarding claim 35: Rai teaches an apparatus according to Claim 15, further comprising three limiters configured to limit each color signal to a maximum value governed by a quantization (**col. 5 lines 61-67 – col. 6 lines 1-3**).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rai et al (US 6,337,692) in view of Bestmann (US 6,433,898).

Regarding claim 32: Rai does not explicitly teach using logarithmizers connected upstream of the matrix and delogarithmizers connected downstream of the matrix.

Bestmann teaches using logarithmizers connected upstream of the matrix (**col. 2 lines 23-27 & col. 6 lines 41-44**) and delogarithmizers are connected downstream of the matrix (**col. 2 lines 30-31 & col. 7 lines 64-67**).

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Rai and Bestmann are combinable because they are from the field of endeavor in image processing (*"Electronic image processing is composed essentially of the steps of image input, image processing and image output."* Bestmann col. 1 lines 11-13).

At the time of the invention, it would be obvious to one of ordinary skill in the art to refine the image correcting capabilities as taught by Rai by introducing the logarithmic compensation for density as taught by Bestmann.

The motivation to do so would to allow for compensating for various film densities to be taken into consideration when processing the image for output (Bestmann col. 6 lines 33-67 – col. 7 lines 1-67).

Therefore, it would have been obvious to combine Rai and Bestmann to obtain the invention as specified in claim 32.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Barbara D. Reinier whose telephone number is (571)270-5082. The examiner can normally be reached on M-Th, 8am-4pm Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Haskins L. Twyler can be reached on 571-272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Barbara D Reinier
Examiner
Art Unit 2625

/Barbara D Reinier/
Examiner, Art Unit 2625

/Twyler L. Haskins/
Supervisory Patent Examiner, Art Unit 2625